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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,690	12/02/2003	Klaus Wagner	Mo6428D/LeA 33,444D	3408

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EXAMINER

MCKENZIE, THOMAS C

ART UNIT PAPER NUMBER

1624

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/725,690	Applicant(s) WAGNER ET AL.	
	Examiner Thomas McKenzie, Ph.D.	Art Unit 1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/869,905.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/2/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to an application filed on 12/2/03. There are nine claims pending and nine under consideration. Claims 8-12 are compound claims. Claim 14 is a composition claim. Claim 15 is a method of using claim. Claims 13 and 16 are method of making claims. This is the first action on the merits. The application concerns some 1,3,5-triazin-2(1H)-imine, 1,3,5-oxadiazin-4-imine, and 1,3,5-thiadiazin-4-imine compounds, compositions, synthesis, and uses thereof.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 5 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for controlling insects, arachnids, and nematodes, does not reasonably provide enablement for all pests. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. A broad reading of pests would include plants, rodents, rabbits, and birds, which are not what is intended. Mammals, plants, and birds have quite different biochemistries than the invertebrates upon which Applicants compounds were tested. The skilled

farmer who would use Applicants compounds would reasonably question the ability of Applicants' compounds to control either plants or vertebrates.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 11, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishimitsu (WO 91/01978 A1). The reference teaches the compounds 80-82, page 114, 162-165, pages 21-22, compounds 338-340, pages 37-38, and compounds 419-422, page 45. The Applicant claims the compounds of formula (I) with A = N-Me, N-Et, R¹ = 3-pyridyl, R² = hydrogen, R³ = -O-Et and -S-Et, R⁴ = R¹⁰ = ethyl, and Z = CN. The reference teaches such compounds with an extra methylene group linking R³. These are compounds 80-82. The difference between the claimed and taught compounds is the length of the linking chain. Applicants claim a one-carbon atom chain and the reference teaches two carbon atoms in the chain. It has been long established that a structural relationship varying the size of a linking carbon chain is *per se* obvious not requiring a specific teaching. Specifically, *In re Shetty*, 195 USPQ 753, *In re Wilder*, 195 USPQ 426 and *Ex*

Parte Greshem 121 USPQ 422 all feature a compound with a C₂-link rejected over a compound with a C₁ link. Similarly, *In re Chupp*, 2 USPQ 2nd 1437 and *In re Coes*, 81 USPQ 369 have a C₁ link unpatentable over a C₂ link.

The Applicant claims the compounds of formula (I) with A = N-Me, N-Et, and N-Bu^t, R¹ = 6-chloro-3-pyridyl, R² = hydrogen, R³ = -O-Et and -S-Et, R⁴ = R¹⁰ = ethyl, and Z = CN. The reference teaches such compounds with an extra methylene group linking R³. These are compounds 162-165. The Applicant claims the compounds of formula (I) with A = N-Me, N-Et, R¹ = 3-pyridyl, R² = hydrogen, R³ = -O-Et and -S-Et, R⁴ = R¹⁰ = ethyl, and Z = NO₂. The reference teaches such compounds with an extra methylene group linking R³. These are compounds 338-340. The Applicant claims the compounds of formula (I) with A = N-Me, N-Et, and N-Bu^t, R¹ = 6-chloro-3-pyridyl, R² = hydrogen, R³ = -O-Et and -S-Et, R⁴ = R¹⁰ = ethyl, and Z = NO₂. The reference teaches such compounds with an extra methylene group linking R³. These are compounds 419-422. Thus, claim 11 is made obvious.

The lack of physical data suggests that the compounds of Ishimitsu (WO 91/01978 A1) are prophetic examples. However, the synthesis outlined in the diagram at the top of page 4 would be capable of making the taught compounds. Synthesis of intermediate (II) with chloromethyl ethyl ether is capable of making

Applicants' claimed compounds. Thus, Ishimitsu (WO 91/01978 A1) is an enabling disclosure for compounds .

The abstract of the reference teaches that the taught compounds have insecticide activity. Thus, the present claims 14-16 are made obvious. A partial translation of the claims of Ishimitsu (WO 91/01978 A1) is being prepared. The Australian document Ishimitsu (AU 9060447 A1) appears to be an English language equivalent of the reference, but unfortunately is not readily available to the Examiner.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969). A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be

commonly owned with this application. See 37 CFR 1.130(b). Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 8-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,683,028. Although the conflicting claims are not identical, they are not patentably distinct from each other because there was no restriction in the parent to the present case from. U.S. Patent No. 6,683,028 arose from that parent. The present claims are preferred embodiments and preferred compounds as taught in the specification of that parent case. The skilled pesticide chemist would be motivated to choose those preferred compounds. This provides the guideposts, which allow him to carve out the present narrower claims from the more generic claims of the parent.

Allowable Subject Matter

5. Claims 9, 10, 12, and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: The present claims 9 and 10 concern 1,3,5-oxadiazoles, with A = oxygen, not contemplated by Ishimitsu (WO 91/01978 A1). The present claim 12 has A = N-Me, R¹¹ = methyl,

R^1 = 2-chloro-5-thiazolyl, R^2 = hydrogen, R^3 = $-O-R^4$ etc., and Z = NO_2 . The reference teaches a compound with A = N-H, R^{11} = hydrogen, R^1 = 2-chloro-5-thiazolyl, R^2 = R^3 = hydrogen, and Z = NO_2 . This is example 493 on page 52. However, this requires two changes to arrive at Applicants claimed compounds.

Conclusion

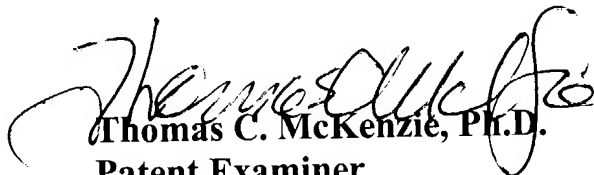
6. Information regarding the status of an application should be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free). Please direct general inquiries to the receptionist whose telephone number is (703) 308-1235.

7. Please direct any inquiry concerning this communication or earlier communications from the Examiner to Thomas C McKenzie, Ph. D. whose telephone number is (571) 272-0670. The FAX number for amendments is (703) 872-9306. The PTO presently encourages all applicants to communicate by FAX. The Examiner is available from 8:30 to 5:30, Monday through Friday. If attempts

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to reach the Examiner by telephone are unsuccessful, please contact James O. Wilson, acting SPE of Art Unit 1624, at (571)-272-0661.


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